

REMARKS

Applicants have carefully reviewed the Office Action of August 18, 2009. The Examiner's comments have been carefully considered. Reconsideration of the rejection of the claims is respectfully respected.

The pending claims are claims 14, 17, 20, 22 and 25. Dependent claims 23 and 24 are cancelled without prejudice and the subject matter of claims 23 and 24 has been incorporated into claim 14, as amended. Dependent claim 17 is amended to correct the spelling of the word "grooves".

The specification is amended to indicate that priority of the subject patent application is based on a patent application filed in Norway on March 20, 2003. This is Norway Patent Application No. 200312282. This claim of foreign priority was made when the above patent application was originally filed and such claim has been made in all the several declarations made by the inventors during the prosecution of this patent application. Applicants request that such claim of foreign priority be acknowledged in this patent application.

Objection to the Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. The Examiner alleges that the following does not find proper antecedent basis in the specification: lines 3-7 of claim 14; lines 11-16 of claim 14; the limitation "and a nut of said spindle to limit linear movement of said compression shoe (lines 3-4 of claim 23).

Applicants submit that the specification as originally submitted does provide proper antecedent bases for there several recitations, that is these recitations are derived from a clear understanding of the invention as illustrated in Figs. 1 through 4 and as disclosed in the patent application, beginning on page 5, line 20 to page 7, line 5. This portion coincides with paragraph [0031] of the U.S. Publication 2005/0166385 of the subject patent application. The recitation of lines 3-4 of claim 23 particularly appears on page 6, line 21 to page 7, line 2. This portion coincides with the second to the last sentence of paragraph [0031] of the U.S. Publication 2005/0166385 of the patent application.

Rejection of Claims Under 35 USC § 112

Claims 14, 17, 20 and 22-25 are rejected under 35 U.S. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claiming the subject matter which applicant regards as the invention.

In an attempt to overcome this rejection, Applicants have amended claim 14 to positively recite “a first pipe member” and “a second pipe member”.

In view of these amendments to claim 14, Applicants respectfully request that this rejection to the claims be withdrawn.

Rejection of Claims Under 35 U.S.C. 103(a)

Claims 14, 17, 20 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reimert (US 4,094,539) in view of Tischler (U.S. Patent No. 6,712,096).

Applicants submit that claim 14, as amended, is patentable over Reimert and Tischler. In the invention of claim 14, a spindle 42 extends from the compression shoe

34 and through a bore 32B in the externally threaded carrier 32 and a nut 46 on the spindle 42 limits the linear movement of the compression shoe 34. The nut 46 is dimensioned to seat in a counter bore in the externally threaded carrier 32 to provide guided movement of the spindle 42 throughout a desired range in the internal cavity of the first pipe member 14. Support for these amendments appears in claims 23 and 24 and also in the last two sentences of paragraph [0031] of U.S. Publication No. US 2005/0166385 of the subject patent application, which coincides with the recitations on page 6, line 21 to page 7, line 5 of the specification.

In the rejection of claim 23, the Examiner alleges that this claim is obvious in view of Reimert combined with Tischler. In this rejection appearing on page 5 of the Office Action, the Examiner states: "With respect to claim 23, further including a spindle (one of the jack bolts 44) extending from said compression member and through a bore in said externally threaded carrier, and a nut on said spindle to limit linear movement of said compression shoe (refer to Figs. 1 and 2 in Tischler)."

Applicants submit that this is an improper application of Tischler in that the Examiner is equating the jack bolts 44 of Tischler to the spindle 42 of the invention. The jack bolts 44 of Tischler may be equated to the jack bolts 38 of the invention, but Applicants submit that the jack bolts 44 of Tischler cannot be equated to the spindle 42 of the claimed invention. In the invention, the jack bolts 44 and the spindle 42 are two different elements having different functions, which elements therefore cannot be interchangeable. The spindle 42 of the invention extends from the compression shoe 34 and through bore 32B of externally threaded carrier 32. As described on page 6, line 21 to page 7, line 2 of the specification, "Positioning of the compression shoe in

compression generator 10 before generating the pushing forces is limited to linear movement by sliding of a spindle 42 in bore 32B along axis 30A while joined by a T-shaped end 44 mounted in a corresponding shaped T-slot formed in arcuate base 34.”

Tischler does not have a compression shoe. There is no element in Tischler that is similar in construction and function as the spindle 42 of the claimed invention and there is no need for Tischler to have a spindle 42 similar to that of the claimed invention.

In the rejection of claim 24, on page 5 of the Office Action, the Examiner states: “With respect to claim 24, wherein said nut is dimensioned to seat in a counter bore in said externally threaded carrier to provide guided movement of said spindle throughout a desired range in said internal cavity. Refer to Figs. 1 and 2 of Tischler.”

Applicants’ comments above with regard to the improper rejection of claim 23 apply here with equal force. If the jack bolts 44 of Tischler are to be equated with the spindle 42 of the claimed invention, then nut 46 of the claimed invention is to be equated with a nut associated with jack bolts 44 of Tischler. This cannot be done since the jack bolts 44 of Tischler (Figs. 1 and 2) do not include a nut similar to nut 46 associated with spindle 42 of the claimed invention, particularly that of claim 14. In claim 14, the nut 46 is recited as being on the spindle 42 to limit linear movement of the compression shoe and being dimensioned to seat in a counter bore in said externally threaded carrier to provide guided movement of said spindle throughout a desired range in said internal cavity of said first pipe member.

The claimed invention, particularly that of claim 14, recites a compressor generator comprising two essential components: 1) jack bolts 38 for extending from the threaded carrier 32 for extending from the carrier into confronting engagement with the

compression shoe residing in the cavity and for generating a pushing force against the second pipe member for forming a mechanical connection of the first pipe member with the second pipe member by torque applied to the jack bolts; and 2) spindle 42 and nut 46 on spindle 42. Applying torque to the jack bolts 38 toward compression shoe 34 generates a pushing force against compression shoe 34 and second pipe member 18 and applying torque to nut 46 on spindle 42 generates a pulling force in a direction opposite to that of jack bolts 38 against compression shoe 34 thereby generating friction between the first pipe member 12 and the second pipe member 14.

Applicants bring the Examiner's attention to the last sentence of paragraph [0006] of the U.S. Publication of the patent application: "The present invention provides a new frictional locking system using an axial friction device for pressing mechanical elements apart in such a way that friction is created between the friction device and two or more mechanical elements comprising part of the construction." The opposite forces being created in the compressor generator of the claimed invention is accomplished through the combination of jack bolts 38 and spindle 42-nut 46 assembly, thereby resulting in friction being created via the compression shoe 34. Since the torque on jack bolts 38 and the torque on the spindle-nut assembly can be adjusted, the amount of friction being created via the compression shoe 34 can be adjusted.

Applicants also bring the Examiner's attention to paragraph [0031] of the U.S. Publication of the patent application which discloses the pushing forces in relative opposite directions to form a frictional interconnection between the elongated pipe members 12 and 14.

Tischler discloses jack bolts 44 arranged in tensioner ring 42. The jack bolts 44 are screwed through the tensioner ring 42 to hold the seal head in engagement with the opening 18 to create a high pressure closure at the end of the pressure chamber 16. (Column 2, lines 56-67). Thus, the jack bolts 44 of Tischler create a pushing force in the same direction against the seal head.

Reimert discloses a screw 27 associated with dog 16. The screw 27 is threaded into partition 28 and has an outer head 29 to which a suitable wrench can be applied for rotating the screw in both directions. (Column 2, lines 21-34). In assembling each screw 27 and dog 16 in the apparatus, the inner shank 30 and head 31 are moved downwardly into slot 32 and the screw 27 is inserted from the interior of the box through its window 17. The screw is turned in an appropriate direction as to the left to thread a screw portion in the partition 28, the outward threading being continued until the lock dog 16 moves completely inwardly of the inner wall 40 of the box. After all the lock dogs 16 and screws 27 have been assembled within the box, and shifted to their extreme outward positions, the box 11 is disposed over the pin. Screw 27 is then rotated in the appropriate direction, as to the right, to force the lock dogs' teeth 19 into the pin grooves 18. (Column 1, lines 47 – 64) In Reimert, a pushing force is also generated in a direction toward dog 16 for engagement of dogs 16 with pin 14.

In both Reimert and Tischler, a pushing force in the same direction is provided to force one member against another member. Neither Reimert nor Tischler teaches two different elements that create opposing forces for creating a frictional force between two members. Reimert discloses screw 27 that creates a pushing force to engage box 11 with

Application No. 10/769,348

Paper dated December 18, 2009

In Reply to Office Action dated August 18, 2009

Docket No. 20045-65

pin 14 and Tischler discloses jack bolts 44 that create a pushing force to seal the pressure chamber of a high-pressure attenuator.

Applicants submit that claim 14, as amended, is not anticipated by either Reimert or Tischler, and is not obvious in view of these two references when considered singly or in combination.

Applicants respectfully request that this rejection to the claims be withdrawn.

Conclusion

In view of the above amendments and remarks, Applicants respectfully submit that claims 14, 17, 20, 22 and 25 are in condition for allowance. Claim 14 contains patentable features not found in the prior art. Dependent claims 17, 20, 21 and 25 add further limitations to claim 14. Since these claims 17, 21, 22 and 25 depend from claim 14 which is believed to be in condition for allowance, these dependent claims are also believed to be in condition for allowance.

A Notice of Allowance is respectfully requested at an early date.

Respectfully submitted,



Suzanne Kikel

Agent for Applicant

Registration No. 28,230

SK/lcl

412-366-6200